CHAPTER 2. REGIONAL TECHNICAL FUNCTIONS

SECTION 1. REGIONAL FLIGHT PROCEDURES BRANCHES

91. GENERAL. This chapter is an overview of the Flight Procedures Branch (FPB) of the Regional Flight Standards Division. The FPB's functions and responsibilities are outlined, with emphasis on the relationship of the FPB and the flight standards district offices (FSDO's). The intent of this section is to familiarize flight standards operations inspectors with the FPB functions which affect aircraft operational safety and which often require coordination between the FPB and the FSDO's. This section also highlights areas where the FPB may be of assistance to flight standards inspectors. The FPB is responsible for the accomplishment, coordination, and support of instrument approach procedures, airspace analysis, obstruction evaluations, and navigation aid functions. Many of the FPB's areas of responsibility are interrelated with FSDO responsibilities and therefore require coordination with the FSDO's. The following paragraphs describe some of these areas.

93. STANDARD INSTRUMENT APPROACH PROCEDURES (SIAP's). The FAA has the responsibility for establishing instrument approach procedures to be used for terminal area operations at civil airports within the U.S. and its territories and possessions. These instrument approach procedures are published in Part 97, by reference to a list of approved procedures and amendment numbers in the Federal Register. When published in Part 97 these approved procedures are available to all users. The FAA also approves instrument procedures developed by U.S. air carriers for foreign airports. Occasionally, the FAA will develop a terminal instrument procedure at a foreign airport if requested by a U.S. air carrier or the foreign government. The FAA will not, however, develop a foreign terminal instrument approach procedure unless that procedure can be subsequently maintained by the initiating region in accordance with FAA Order 8260.31, Foreign Terminal Instrument Procedures. In developing original Standard Instrument Approach Procedures (SIAP's), flight standards operations inspectors may be asked to determine the suitability of a local altimeter source, or to provide the numbers and types of operators in a particular area. Flight standards inspectors may also be asked to evaluate and comment on the acceptability of specific departure procedures (SID's). When evaluating existing procedures, the FPB may request operator comments, through the POI, on such items as procedure accuracy, best minimums, and usability.

95. SPECIAL TERMINAL INSTRUMENT PROCEDURES. Special terminal instrument procedures are procedures that are authorized for use only by an individual air carrier or by other specified air operators. Special terminal instrument procedures are referred to as "special procedures." The FPB is responsible for determining the requirements for developing special procedures. Special procedures are normally used to provide instrument service to an air carrier or air taxi operator where an equivalent service cannot be provided by a public use instrument approach procedure. Requests for special procedures should be processed as follows:

A. Any request for a special procedure must be forwarded to the FPB for approval. The request should specify the reasons for the special procedure and include supporting documentation concerning the type of aircraft to be used and any particular performance characteristics involved.

B. After coordination with other operational divisions, the request will be forwarded to the local flight inspection field office (FIFO) for procedure development. If specific crew qualifications, training, or other special considerations are required to execute the special procedure, a statement restricting the use of the procedure to a particular operator (such as, "For use by ABC Airlines only" or "Special flightcrew training required") will be annotated on the procedure by the FPB.

C. When a waiver for certain criteria is approved for a special procedure, the appropriate FSDO's will be advised of any conditions being placed on the use of the procedure. This action is necessary to ensure user compliance with the equivalent level of safety provisions. For example, an equivalent level of safety provision may require the user to establish additional pilot training or familiarization with certain aspects of a procedure. Such a provision requires oversight by the principal operations inspector (POI). The POI is responsible for ensuring that the flightcrew training required by the waiver (or any other special training or familiarization required of the carrier) is accomplished.

D. The FPB will maintain a list of authorized users for each special procedure. This enables operators to be notified if the special procedure is amended or if a problem develops that may preclude its use. POI's must notify the

FPB when an operator delegates the use of a special procedure to another operator. POI's must also notify the FPB when an operator who is authorized to use a special procedure is involved in a merger or acquisition or when an operator surrenders its certificate.

E. The FPB will initiate action to cancel a special procedure when any of the following situations occur:

(1) An operator surrenders its certificate and is the only operator authorized for that special procedure.

(2) The navigation aid will no longer support the special procedure. For example, the facility is permanently shut down or decommissioned, or flight inspection reveals that the facility is consistently out of tolerance and therefore unsafe.

(3) The special procedure no longer complies with criteria. For example, a new obstruction is built in the final approach segment and a reasonable alternative is not available.

(4) The airport where the special procedure is located has been permanently closed.

(5) An equivalent public procedure is developed.

97. MILITARY PROCEDURES.

A. FAA Order 8260.3B, TERPS specifies that the U.S. Navy, Air Force and Coast Guard are responsible for the establishment and approval of instrument procedures for airports under their respective jurisdictions. Instructions for FAA (FIFO) review and coordination of these procedures are in chapter 6 of FAA Order 8260.19. Under an agreement with the U.S. Army, the FAA develops instrument procedures for the U.S. Army (see FAA Order 8260.15, U.S. Army Terminal Instrument Procedures Service). The FAA will also develop instrument procedures for the U.S. Air Force when a unique Air Force procedure is needed at civilian fields (See FAA Order 8260.32.)

B. The FAA will accept military instrument procedures for civil use when they comply with all the requirements of TERPS, unless the note "Not for Civil Use" is annotated on the procedure by the military. However, in order to ensure that a particular military instrument procedure is adequate for civil use, inspectors should request the FPB to confirm that the procedure is authorized for civil use.

99. STANDARD OPERATIONS SPECIFICATIONS. The FPB is directly involved in Part C of the operations specifications and will work closely with flight standards inspectors when developing special procedures for a particular carrier. The FPB should also be contacted for assistance in developing Category II and III procedures and for reviewing or developing foreign terminal instrument procedures. Parts 121, 125, 129, and 135 operators may use lower than standard takeoff minimums in accordance with their operations specifications. These lower takeoff minimums apply except where the takeoff visibility or RVR required for a particular runway is greater than the standard takeoff minimums. Flight standards inspectors who have questions about the applicability of published takeoff minimums that may be greater than the appropriate standard takeoff minimums should contact the FPB.

101. OBSTRUCTION EVALUATION. Part 77 requires that the Administrator be notified before the construction or alteration of any structure which may present a hazard to air navigation. The FPB has a major program for obstruction evaluation. While the Air Traffic Service is the focal point for administering the program, the regional Airway Facilities Divisions, the Airports Divisions, and Flight Standards Divisions play key roles. The Airway Facilities Division is responsible for evaluating the effects of a proposed structure on electromagnetic radiation. The Airports Division evaluates the effects a structure may have on airport surfaces. The Flight Standards Division evaluates the effects the structure may have on the safety of aircraft operations. Local FSDO's are provided copies of proposals and have the opportunity to comment on and to make recommendations to the FPB on the safety of aircraft operations within the vicinity of a proposed structure. Such evaluations may require visits to airports that would be affected. It may be necessary to evaluate the effects the proposed structure will have on VFR activity (both within the vicinity of airports as well as VFR routes). The FPB will evaluate the effects that a proposed structure would have on IFR operations to determine that the safety of such operations will not be compromised. The results of the evaluation may require that a restriction be placed on affected instrument procedures. Operations inspectors should be familiar with the applicable parts of FAA Order 7400.2, Procedures for Handling Airspace Matters.

103. AIRPORT AIRSPACE ANALYSIS.

A. *General.* Part 157, Notice of Construction, Alteration, Activation, or Deactivation of Airports, requires proponents of civil airport projects which do not involve federal funds to notify the Administrator before the project begins. This requirement assures that the proposed civil airport project

can be considered from the standpoint of its effect on the safe and efficient use of airspace by aircraft. Other airport projects subject to airport/airspace analysis studies are those eligible for Airport Improvement Program funds, the Military Construction Program, the designation of instrument landing runways, and the operational status of an airport changing from VFR to IFR.

B. *Airports.* Since airports can be small isolated airports (including ultralight flight parks), heliports, and large intercontinental airports, the problems associated with their establishment are varied. Flight standards involvement in studies of proposed airports or heliports, however, is generally concerned with the operational safety aspects, the feasibility of anticipated operations, and the practicality and necessity of establishing instrument approach and VFR flight procedures. Any proposed nonstandard installation or facility must be thoroughly reviewed to determine if an adequate level of safety can be achieved. Flight standards operations inspectors may be asked to attend preconstruction conferences with proponents of the project such as, airport personnel, city officials, and other interested FAA offices. Inspectors attending these conferences are expected to make decisions on behalf of the Flight Standards Division concerning operational safety during airport construction.

C. *Heliports.* All proposals for the establishment of heliports must be given an onsite operational evaluation by operations inspectors. Evaluations of heliport sites should be conducted by inspectors qualified in helicopters. Where a heliport is to be located in a congested area or on a roof top, the evaluation must be conducted by an inspector who is qualified in helicopters.

D. *Safety Analysis.* Thorough evaluations of construction proposals are essential since some proposals may be acceptable from an airspace utilization perspective, but unacceptable from an operational safety standpoint. Flight standards inspectors involved in preconstruction conferences must determine from the proposal whether any aspect of operational safety will be adversely affected. Any operational limitations or restrictions associated with ingress/egress routes or noise sensitive areas such as hospitals or schools should be clearly stated in any recommendations furnished to the FPB. Some areas to be considered are as follows:

- Is the type of activity contemplated compatible with the proposed approach, departure, and landing areas
- Will the effective length of runways be realistic for the anticipated activity
- Will there be conflicts with other airports
- Will existing or proposed man-made objects or any natural objects affect the safety of flight operations

105. NOISE ABATEMENT. The establishment of noise abatement procedures is the responsibility of the airport operator, however, flight standards has an input from an aircraft operational safety standpoint. When the FPB receives noise abatement procedures for coordination, they are reviewed for safety, practicality, and adherence to criteria. FSDO's will be asked to coordinate on these procedures and to make recommendations regarding their safety.

107. OFF-AIRWAY ROUTES.

A. Usually, requests for off-airway routes are initiated by an air carrier through the POI. The POI shall forward all such requests to their respective FPB for further processing. Upon receipt of the request, the FPB will coordinate with the Air Traffic Service to ensure that there are no airspace conflicts. The request will then be sent to the FIFO for development.

B. Off-airway routes based on public navigation facilities and contained entirely within controlled airspace are published as direct Part 95 routes. Those based on privately-owned navigation facilities, or not entirely contained in controlled airspace, will be published in the National Flight Data Digest (NFDD).

109. AIR NAVIGATION FACILITIES. The FPB is responsible for recommending the priority and location for installation of terminal navigation aids that are funded through the facilities and equipment (F&E) budget. Instrument procedures often determine the alignment and location of navigation facilities as well as the location, marking, and lighting of airport landing and maneuvering areas. The allocation of funds frequently depends upon the determination that efficient procedures can be developed and can be justified on the basis of operational benefits (landing minimums) or safety improvements. Therefore, the operational planning associated with facility installations and airport development, particularly in large terminal areas, is a major responsibility of the Flight Standards Service. Flight standards inspectors can recommend priorities and candidate locations for installation of air navigation facilities based on proponent or user input at any time. Flight

standards district offices are surveyed annually by the FPB for a list of their requirements for new navigation aids.

111. NON-FEDERAL NAVIGATION AIDS. In some areas where adequate service cannot be provided through federal navigation aids, an individual carrier may purchase and install a non federal aid in order to provide this service. These facilities are not a part of the National Airspace System, however, they must meet the requirements of Part 171, Non-Federal Navigation Facilities. As a prerequisite to having an instrument approach procedure developed, these facilities must meet FAA flight inspection requirements.

112. -114. RESERVED.

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